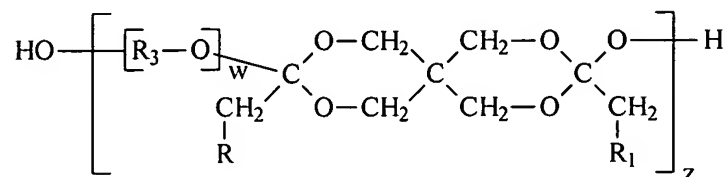


IN THE CLAIMS

1-17. (Canceled).

18. (Previously Presented) A medical device, comprising a coating, the coating comprising a polymer including a unit having a formula:



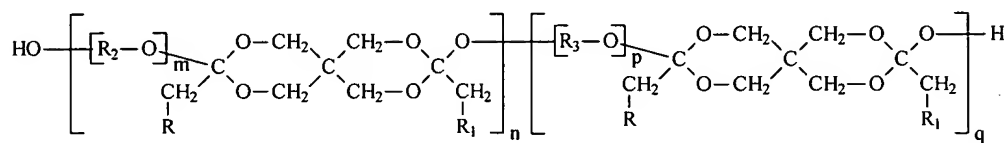
wherein:

R and R₁ are, independently, unsubstituted or substituted straight-chained, branched, or cyclic alkyl radicals C₁-C₈, or unsubstituted or substituted aryl radicals;

R₃ is an aliphatic, cycloaliphatic, aromatic, or organosilicon radical; and

“w” and “z” are integers, where the value of “w” is between 1 and 40, the value of “z” is between 9 and 700, and

a polymer having a formula



wherein:

R and R₁ are, independently, unsubstituted or substituted straight-chained, branched, or cyclic alkyl radicals C₁-C₈, or unsubstituted or substituted aryl radicals;

R₂-O is a non-fouling moiety derived from a hydroxylated functional compound;

R₃ is an aliphatic or cycloaliphatic radical;

“m,” “n,” “p,” and “q” are all integers, where the value of “m” is between 5 and 500, the value of “n” is between 2 and 350, the value of “p” is between 1 and 20, and the value of “q” is between 10 and 550.

19. (Previously Presented) The device of Claim 18, wherein the hydroxylated functional compound comprises poly(alkylene glycols), hydroxylated poly(N-vinyl pyrrolidone), dextran, dextrin, hyaluronic acid, derivatives of hyaluronic acid, poly(2-hydroxyethyl methacrylate), hydroxy functional poly(styrene sulfonate), hydroxy functional phosphoryl choline methacrylate polymers, polymers with both hydroxyl and phosphoryl choline functionality, heparin, or combinations thereof.

20. (Original) The device of Claim 19, wherein poly(alkylene glycols) are selected from a group consisting of poly(ethylene glycol), poly(propylene glycol), poly(tetramethylene glycol), and poly(ethylene oxide-co-propylene oxide).

21-43. (Canceled).

44. (Currently amended) A medical article, comprising an implantable substrate having a coating deposited on the substrate, the coating comprising a polymer, the polymer being a product of co-polycondensation of a diketene acetal, a diol and a hydroxylated functional compound,

wherein the diol comprises aliphatic, cycloaliphatic, aromatic, or organosilicon diols or combinations thereof,

wherein the aliphatic diol comprises alkylene glycols, poly- or oligoalkylene glycols, or combinations thereof,

wherein the alkylene glycols are selected from the group consisting of ethylene glycol, 1,2-propylene glycol, 1,4-butanediol, 1,5-pentanediol, 1,7-heptanediol, 1,8-octanediol, 1,9-

nonanediol, 1,10-decanediol, 1,11-undecanediol, 1,12-dodecanediol, 1,13-tridecanediol, 1,14-tetradecanediol, 1,15-pentadecanediol, 1,16-hexadecanediol, 1,3-propylene glycol, butane-1,3-diol, pentane-2,4-diol, hexane-2,5-diol, and combinations thereof,

wherein the hydroxylated functional compound comprises ~~comprises~~ hydroxylated poly(N-vinyl pyrrolidone), dextran, dextrin, hyaluronic acid, derivatives of hyaluronic acid, poly(2-hydroxyethyl methacrylate), hydroxy functional poly(styrene sulfonate), hydroxy functional phosphoryl choline methacrylate polymers, polymers with both hydroxyl and phosphoryl choline functionalities, heparin or combinations thereof.

45-99. Cancelled.

100. (Previously Presented) The article of claim 44, wherein the hydroxylated functional compound comprises dextran.

101. (Previously Presented) The article of claim 44, wherein the hydroxylated functional compound comprises dextrin.

102. (Previously Presented) The article of claim 44, wherein the hydroxylated functional compound comprises hyaluronic acid.

103. (Previously Presented) The article of claim 44, wherein the hydroxylated functional compound comprises derivatives of hyaluronic acid.

104. (Previously Presented) The article of claim 44, wherein the hydroxylated functional compound comprises poly(2-hydroxyethyl methacrylate).

105. (Previously Presented) The article of claim 44, wherein the hydroxylated functional compound comprises hydroxy functional poly(styrene sulfonate).

106. (Previously Presented) The article of claim 44, wherein the hydroxylated functional compound comprises hydroxy functional phosphoryl choline methacrylate polymers.

107. (Previously Presented) The article of claim 44, wherein the hydroxylated functional compound comprises polymers with both hydroxyl and phosphoryl choline functionality.

108. (Previously Presented) The article of claim 44, wherein the hydroxylated functional compound comprises heparin.